

Table S11 GO term enrichment for biological process in the North American cline for genes that overlap windows in the top 2.5% tail of Fst.

2.5 % Tail Biological Process		
GO term	q-value	description
GO:0007476	1.63E-07	imaginal disc-derived wing morphogenesis
GO:0048749	1.63E-07	compound eye development
GO:0006355	1.63E-07	regulation of transcription, DNA-dependent
GO:0007411	3.96E-07	axon guidance
GO:0007350	1.62E-06	blastoderm segmentation
GO:0007155	4.43E-06	cell adhesion
GO:0007513	5.83E-06	pericardial cell differentiation
GO:0045449	8.22E-06	regulation of transcription
GO:0016203	1.10E-05	muscle attachment
GO:0007435	1.10E-05	salivary gland morphogenesis
GO:0007424	1.55E-05	open tracheal system development
GO:0006468	2.18E-05	protein amino acid phosphorylation
GO:0007156	2.62E-05	homophilic cell adhesion
GO:0007611	3.07E-05	learning or memory
GO:0035023	3.11E-05	regulation of Rho protein signal transduction
GO:0048477	8.61E-05	oogenesis
GO:0008355	8.63E-05	olfactory learning
GO:0007472	9.07E-05	wing disc morphogenesis
GO:0007399	9.14E-05	nervous system development
GO:0007242	1.17E-04	intracellular signaling cascade
GO:0007614	1.17E-04	short-term memory
GO:0007619	1.86E-04	courtship behavior
GO:0007165	2.23E-04	signal transduction
GO:0030097	2.46E-04	hemopoiesis
GO:0007268	2.87E-04	synaptic transmission
GO:0048800	3.69E-04	antennal morphogenesis
GO:0016318	4.06E-04	ommatidial rotation
GO:0008360	4.06E-04	regulation of cell shape
GO:0007417	4.06E-04	central nervous system development
GO:0016055	4.70E-04	Wnt receptor signaling pathway
GO:0007507	4.82E-04	heart development
GO:0035277	4.82E-04	spiracle morphogenesis, open tracheal system
GO:0007474	5.54E-04	imaginal disc-derived wing vein specification
GO:0007186	5.87E-04	G-protein coupled receptor protein signaling pathway
GO:0007617	6.47E-04	mating behavior
GO:0035172	6.47E-04	hemocyte proliferation
GO:0035225	6.47E-04	determination of genital disc primordium
GO:0007455	7.31E-04	eye-antennal disc morphogenesis
GO:0008407	7.66E-04	bristle morphogenesis
GO:0007428	1.01E-03	primary branching, open tracheal system

GO:0007420	1.03E-03	brain development
GO:0006811	1.05E-03	ion transport
GO:0008104	1.05E-03	protein localization
GO:0008356	1.07E-03	asymmetric cell division
GO:0007391	1.12E-03	dorsal closure
GO:0045433	1.15E-03	male courtship behavior, veined wing generated song production
GO:0007632	1.15E-03	visual behavior
GO:0001745	1.22E-03	compound eye morphogenesis
GO:0008586	1.25E-03	imaginal disc-derived wing vein morphogenesis
GO:0007400	1.43E-03	neuroblast fate determination
GO:0040014	1.43E-03	regulation of multicellular organism growth
GO:0016477	1.47E-03	cell migration
GO:0007422	1.57E-03	peripheral nervous system development
GO:0006813	1.80E-03	potassium ion transport
GO:0030707	1.83E-03	ovarian follicle cell development
GO:0045475	1.85E-03	locomotor rhythm
GO:0040018	1.85E-03	positive regulation of multicellular organism growth
GO:0048675	1.85E-03	axon extension
GO:0007173	1.99E-03	epidermal growth factor receptor signaling pathway
GO:0045165	1.99E-03	cell fate commitment
GO:0008286	1.99E-03	insulin receptor signaling pathway
GO:0030162	1.99E-03	regulation of proteolysis
GO:0007498	2.01E-03	mesoderm development
GO:0007017	2.07E-03	microtubule-based process
GO:0008105	2.68E-03	asymmetric protein localization
GO:0007442	2.68E-03	hindgut morphogenesis
GO:0007475	2.68E-03	apposition of dorsal and ventral imaginal disc-derived wing surfaces
GO:0006916	2.68E-03	anti-apoptosis
GO:0007443	2.68E-03	Malpighian tubule morphogenesis
GO:0030307	2.68E-03	positive regulation of cell growth
GO:0035317	2.68E-03	imaginal disc-derived wing hair organization
GO:0048149	2.68E-03	behavioral response to ethanol
GO:0006816	2.68E-03	calcium ion transport
GO:0008345	2.68E-03	larval locomotory behavior
GO:0007623	2.82E-03	circadian rhythm
GO:0001737	3.83E-03	establishment of imaginal disc-derived wing hair orientation
GO:0002168	3.83E-03	instar larval development
GO:0016199	3.83E-03	axon midline choice point recognition
GO:0030713	3.83E-03	ovarian follicle cell stalk formation
GO:0007369	3.83E-03	gastrulation
GO:0008049	3.83E-03	male courtship behavior
GO:0007431	3.83E-03	salivary gland development
GO:0042051	3.83E-03	compound eye photoreceptor development
GO:0007629	3.83E-03	flight behavior

GO:0007528	3.83E-03	neuromuscular junction development
GO:0008045	4.17E-03	motor axon guidance
GO:0007419	4.17E-03	ventral cord development
GO:0007427	4.17E-03	epithelial cell migration, open tracheal system
GO:0007269	5.13E-03	neurotransmitter secretion
GO:0007446	5.54E-03	imaginal disc growth
GO:0051017	5.54E-03	actin filament bundle formation
GO:0007416	5.54E-03	synapse assembly
GO:0001736	5.54E-03	establishment of planar polarity
GO:0007298	6.19E-03	border follicle cell migration
GO:0007140	6.53E-03	male meiosis
GO:0042067	6.53E-03	establishment of ommatidial polarity
GO:0030178	6.53E-03	negative regulation of Wnt receptor signaling pathway
GO:0007398	6.53E-03	ectoderm development
GO:0045893	6.86E-03	positive regulation of transcription, DNA-dependent
GO:0007349	6.86E-03	cellularization
GO:0001709	7.60E-03	cell fate determination
GO:0008344	7.60E-03	adult locomotory behavior
GO:0048190	7.89E-03	wing disc dorsal/ventral pattern formation
GO:0007494	8.46E-03	midgut development
GO:0007520	8.46E-03	myoblast fusion
GO:0001700	8.54E-03	embryonic development via the syncytial blastoderm
GO:0007530	9.93E-03	sex determination
GO:0001708	9.93E-03	cell fate specification
GO:0002121	9.93E-03	inter-male aggressive behavior
GO:0007390	9.93E-03	germ-band shortening
GO:0051276	9.93E-03	chromosome organization
GO:0000226	9.93E-03	microtubule cytoskeleton organization
GO:0019991	9.93E-03	septate junction assembly
GO:0055059	1.06E-02	asymmetric neuroblast division
GO:0007015	1.16E-02	actin filament organization
GO:0007517	1.19E-02	muscle organ development
GO:0007602	1.19E-02	phototransduction
GO:0045944	1.28E-02	positive regulation of transcription from RNA polymerase II promoter
GO:0007224	1.31E-02	smoothened signaling pathway
GO:0007317	1.31E-02	regulation of pole plasm oskar mRNA localization
GO:0016310	1.31E-02	phosphorylation
GO:0007274	1.31E-02	neuromuscular synaptic transmission
GO:0007163	1.68E-02	establishment or maintenance of cell polarity
GO:0007480	1.72E-02	imaginal disc-derived leg morphogenesis
GO:0006915	2.03E-02	apoptosis
GO:0030036	2.03E-02	actin cytoskeleton organization
GO:0006357	2.05E-02	regulation of transcription from RNA polymerase II promoter
GO:0030718	2.05E-02	germ-line stem cell maintenance

GO:0008595	2.05E-02	determination of anterior/posterior axis, embryo
GO:0001751	2.13E-02	compound eye photoreceptor cell differentiation
GO:0007346	2.13E-02	regulation of mitotic cell cycle
GO:0040007	2.13E-02	growth
GO:0006350	2.20E-02	transcription
GO:0006470	2.33E-02	protein amino acid dephosphorylation
GO:0007444	2.44E-02	imaginal disc development
GO:0008340	2.44E-02	determination of adult lifespan
GO:0002009	2.66E-02	morphogenesis of an epithelium
GO:0048813	3.11E-02	dendrite morphogenesis
GO:0006911	3.11E-02	phagocytosis, engulfment
GO:0006836	3.30E-02	neurotransmitter transport
GO:0008298	4.08E-02	intracellular mRNA localization
GO:0016321	4.24E-02	female meiosis chromosome segregation
GO:0016567	4.99E-02	protein ubiquitination
GO:0046843	4.99E-02	dorsal appendage formation
